CD-40 and CD-60 Series Controlled Disc Steam Traps

Carbon Steel
For Pressures to 41 bar... Capacities to 1 300 kg/h

Description
Armstrong CD-40 and CD-60 Series controlled disc traps contain a replaceable capsule, making it possible to renew a worn trap by simply replacing the capsule. A heating chamber in the shell ensures consistent operation. This steam jacket provides a relatively constant temperature in the control chamber regardless of ambient conditions. Cycling rate is controlled and does not increase when the trap is exposed to cold winds, rain or snow. CD-40 Series traps are also available with optional integral 0.045” perforated stainless steel strainer screens. CD-60 Series traps contain integral strainers with ratios of open area to inside area of pipe that equal or exceed those of most separate "Y" type strainers.

Maximum Operating Conditions
Maximum allowable pressure (vessel design):†
- Model CD-40 41 bar @ 260°C
- Model CD-60 41 bar @ 399°C
Minimum operating pressure: 0.7 bar
Maximum back pressure: 50% of inlet pressure (recommended)

Connections
- Model CD-40 and CD-60 Screwed BSPT and NPT
- Model CD-60 Socketweld
- Model CD-60 Flanged DIN or ANSI (welded)

Materials Model CD-40
- Body: Carbon steel – C-1215
- Control chamber: Hardened stainless steel
- Disc: Hardened stainless steel
- Capsule body: Hardened stainless steel
- Strainer screen (option): Stainless steel

Materials Model CD-60
- Body: ASTM A216 WCB
- Cap: ASTM A216 WCB or ASTM A105
- Control chamber: Hardened stainless steel
- Disc: Hardened stainless steel
- Capsule body: Hardened stainless steel
- Strainer screen: 20 x 20 mesh stainless steel

Option
CD-40 Series integral strainer screen (0.045” perforated stainless steel)

Capacity given are continuous discharge capacities in kilograms of hot condensate per hour at pressure differential indicated with condensate temperatures approximately 14°C below steam temperatures.

Note: CD traps can operate with minimum of 0.15 bar inlet pressure and a maximum of 80% back pressure. However, for best results, inlet pressure should not drop below 0.7 bar and back pressure should not exceed 50% of inlet pressure.

Specification
Controlled disc steam trap, type ... in carbon steel. CD-60 includes integral strainer. Maximum allowable pressure 41 bar.

How to Order
- Model number
- Size and type of pipe connection
- Any options required

| Table ST-167-1. CD-40 & CD-60 Series Capacity |
|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Pressure, bar   | Capacity, kg/h  |
| 0.1             | 50              | 100             | 150             | 200             | 250             |
| 0.05            | 100             | 150             | 200             | 250             | 300             |
| 0.025           | 200             | 250             | 300             | 350             | 400             |
| 0.01            | 300             | 350             | 400             | 450             | 500             |
| 0.005           | 400             | 450             | 500             | 550             | 600             |

| Table ST-167-1. CD-40 and CD-60 Series Trap (dimensions in mm) |
|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Pipe Connections | Model No.       |
|                 | CD-41*          | CD-42*          | CD-43*          | CD-61           | CD-62           | CD-63           |
| *A* Body Outside Diameter | 3/8" | 1/2" | 3/4" | 1" | 10 | 15 | 20 | 25 |
| *B* Height | — | — | — | — | 66.7 | 66.7 | 87.3 | 108.0 |
| *B* Face-to-Face (screwed & SW) | 76.2 | 86.5 | 100.0 | 117.5 | 88.9 | 88.9 | 117.0 | 122.0 |
| *C* Face-to-Face (flanged PN40**) | — | — | — | — | 150 | 170 | 180 |
| Weight in kg (screwed & SW) | 0.3 | 0.8 | 1.9 | 1.2 | 1.1 | 2.2 | 3.1 |
| Weight in kg (flanged PN40**) | — | — | — | 2.6 | 4.3 | 5.7 |

* Optional integral strainer available.
** Other flange sizes, ratings and face-to-face dimensions are available on request.
All models comply with the Article 4.3 of the PED (2014/68/UE).
† May be derated depending on flange rating and type.

All dimensions and weights are approximate. Use certified print for exact dimensions. Design and materials are subject to change without notice.